WHAT IS CLAIMED IS:

1. A conductive carbonaceous-fiber sheet which has a thickness of from 0.05 to 1 mm, a weight per a unit area of from 60 to 250 g/m^2, a bending resistance (L) as determined by the 45° Cantilever method of 6 cm or higher, and an in-plane volume resistivity of 0.2 Ωcm or lower.

2. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has an air permeability as determined in accordance with JIS L 1096, method A (frazil method) of from 50 to 150 $cm^3/cm^2 \cdot sec$, the air permeability being a measure of the gas-diffusing properties of the sheet.

3. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has a thickness of from 0.1 to 0.5 mm.

4. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has a weight per a unit area of from 80 to 200 g/m^2.

5. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has a bending resistance (L) as determined by the 45° Cantilever method of 8 cm or higher.

6. The conductive carbonaceous-fiber sheet as claimed in claim 1, which comprises carbonaceous fibers

constituted of monofilaments having a diameter of from 6 to 50 μm.

7. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has an in-plane volume resistivity of 0.07 Ωcm or lower.

8. The conductive carbonaceous-fiber sheet as claimed in claim 1, which comprises carbonaceous fibers fused to one another.

9. The conductive carbonaceous-fiber sheet as claimed in claim 1, which comprises carbonaceous fibers bonded to one another with a binder or a product of carbonization of the binder.

10. The conductive carbonaceous-fiber sheet as claimed in claim 1, which contains a binder or a product of carbonization of the binder in an amount of from 0.01 to 25% by weight and comprises carbonaceous fibers bonded to one another by surface coating with the binder or its carbonization product.

11. The conductive carbonaceous-fiber sheet as claimed in claim 10, which contains the binder or its carbonization product in an amount of from 0.01 to 7% by weight.

12. The conductive carbonaceous-fiber sheet as claimed in claim 1, which contains a binder or a product of carbonization of the binder in an amount of

from 10 to 40% by weight and comprises carbonaceous fibers bonded to one another with the binder or its carbonization product through point contact.

13. The conductive carbonaceous-fiber sheet as claimed in claim 12, wherein the carbonaceous fibers are ones obtained by spraying or applying a dispersion of fine particles of a semicured thermosetting resin, optionally conducting drying, pressing or both of them, and then completely curing the resin.

14. The conductive carbonaceous-fiber sheet as claimed in any one of claims 1 to 13, which is a woven fabric.

15. The conductive carbonaceous-fiber sheet as claimed in claim 1, which has a degree of fluffing of from the second to the fifth grade in terms of the index as determined through a fluff grade test.

16. A conductive carbonaceous-fiber woven fabric which has a thickness of from 0.05 to 1 mm, a weight per a unit area of from 60 to 250 g/m^2, a bending resistance (L) as determined by the 45° Cantilever method of 6 cm or higher, and an in-plane volume resistivity of 0.10 Ωcm or lower.

17. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has a thickness of from 0.1 to 0.5 mm.

18. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has a weight per a unit area of from 120 to 200 g/m^2.

19. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has a bending resistance (L) as determined by the 45° Cantilever method of 8 cm or higher.

20. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which comprises carbonaceous fibers constituted of monofilaments having a diameter of from 6 to 50 μm.

21. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has an in-plane volume resistivity of 0.07 Ωcm or lower.

22. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has a thickness of from 0.1 to 0.5 mm, a weight per a unit area of from 130 to 170 g/m^2, a bending resistance (L) as determined by the 45° Cantilever method of 8 cm or higher, and an in-plane volume resistivity of 0.06 Ωcm or lower.

23. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which comprises carbonaceous fibers fused to one another.

24. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which comprises

carbonaceous fibers bonded to one another with a binder or a product of carbonization of the binder.

25. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which contains a binder or a product of carbonization of the binder in an amount of from 0.01 to 7% by weight and comprises carbonaceous fibers bonded to one another with the binder or its carbonization product.

26. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which comprises carbonaceous fibers which are a product of carbonization of acrylic fibers obtained by spinning a polymer comprising monomer units derived from acrylonitrile.

27. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which is produced through the steps of weaving a precursor of carbonaceous fibers and then carbonizing the woven material.

28. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which is a plain weave fabric.

29. The conductive carbonaceous-fiber woven fabric as claimed in claim 16, which has a degree of fluffing of from the second to the fifth grade in terms

of the index as determined through a fluff grade test.

30. A solid polymer electrolyte fuel cell which employs the conductive carbonaceous-fiber sheet as claimed in any one of claims 1 to 13 and 15 as a gas diffusion layer material.

31. A solid polymer electrolyte fuel cell which employs the conductive carbonaceous-fiber woven fabric as claimed in any one of claims 16 to 29 as a gas diffusion layer material.

32. A motor vehicle having the solid polymer electrolyte fuel cell as claimed in claim 30 mounted therein.

33. A motor vehicle having the solid polymer electrolyte fuel cell as claimed in claim 31 mounted therein.

34. A cogeneration power system having the solid polymer electrolyte fuel cell as claimed in claim 30 installed therein.

35. A cogeneration power system having the solid polymer electrolyte fuel cell as claimed in claim 31 installed therein.

36. A solid polymer electrolyte fuel cell which employs the conductive carbonaceous-fiber sheet as claimed in claim 14 as a gas diffusion layer material.